UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,678	12/18/2001	Georgina Sweeney	1713A1	3528

7590	04/04/2006

PPG INDUSTRIES, INC.
Intellectual Property Department
One PPG Place
Pittsburgh, PA 15272

EXAMINER
GODDARD, BRIAN D

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/023,678	SWEENEY ET AL.
	Examiner	Art Unit	
	Brian Goddard	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 January 2006_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,3-8,11-22,24-26 and 43-47_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3-8,11-22;24-26 and 43-47_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _18 December 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is responsive to the Request for Reconsideration filed 17

January 2006.

2.   Claims 1, 3-8, 11-22, 24-26 and 43-47 are pending in this application. Claims 1,

16, 21 and 43 are independent claims. This action is made Final.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

3.   Claims 1, 3-8, 11-22, 24-26 and 43-47 are rejected under 35 U.S.C. 103(a) as

being unpatentable over U.S. Patent Application Publication No. 2002/0007289 to Malin

in view of U.S. Patent No. 6,516,239 to Madden et al.

Referring to claim 1, Malin discloses a method of determining the status of a

vehicle undergoing repair substantially as claimed. See Figures 1-8 and the

corresponding portions of the specification for this disclosure. Specifically, Malin

teaches a method of determining the status of a vehicle undergoing repair [See Fig. 1]

comprising the steps of:

maintaining a computer database [725] containing a vehicle identifier [See ¶

0045 and Figs. 3 & 7] for a vehicle undergoing repair and repair status information [See

Figs. 1, 3, 7 & 9] for the vehicle undergoing repair, the vehicle identifier comprising a

repair order number [See Fig. 3];

periodically updating the repair status information on the database by electronically transferring [See ¶ 0034, 0057-0058 & 0070-0072 and Steps 925-930 (shop personnel update repair status by electronically transferring status data to the shop database 725 via a shop terminal 720)] data on the status [repair status] of the vehicle undergoing repair to the computer database [725];

transferring [See Steps 925-930 (shop database 725 synchronized with platform server database 750)] the updated database information to a remote location [705];

searching [See Step 935] the information at the remote location [customer or third party searches for status information in platform server database 750] to locate the vehicle undergoing repair; and

identifying data on the status [requested status data is provided to the requester (See Steps 145 and 935)] of the vehicle undergoing repair.

Malin does not explicitly teach that the vehicle identifier comprises a vehicle identification number or a bar code as claimed. However, this is because Malin is only directly concerned with the tracking of individual repair orders and the generation of statistics therefrom. Madden discloses a system and method for tracking the status of a vehicle undergoing assembly/repair, similar to that of Malin, wherein a computer database [208] containing a vehicle identifier [See Column 7, line 29 et seq.] for a vehicle undergoing repair and repair status information [See Abstract, Summary & all portions of specification] for the vehicle undergoing repair is maintained, the vehicle identifier comprising a vehicle identification number [VIN (See Column 7, line 29 et seq.; Column 9, line 8 et seq.; etc.)] as claimed. Madden further discloses reasons for using

the VIN as an identifier for the vehicle, one being to track the repair history of the

vehicle (See Abstract & Summary).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to add a vehicle identification number (VIN), such as in Madden, to

Malin's database to obtain the invention as claimed. One would have been motivated to

do so in order to efficiently track the entire repair history of the vehicle, in addition to

tracking status of a single repair, as disclosed by Madden.

Referring to claim 3, the combination of Malin and Madden as applied to claim 1

above (hereafter 'Malin/Madden') teaches the method of claim 1, as above, wherein the

remote location is a database [750[1]] accessible through a website [See Platform Server

740 and ¶ 0040 & 0071] as claimed.

Referring to claim 4, Malin/Madden teaches the method of claim 3, as above,

further comprising electronically requesting [See Step 935] the status of the vehicle prior

to said searching step [the database is searched for data that is requested] as claimed.

Referring to claims 5 and 6, Malin/Madden teaches the method of claim 1, as

above, wherein the steps are performed on a global computer communications network

[710 (e.g. the Internet)] as claimed.

Referring to claims 7 and 8, Malin/Madden teaches the method of claim 2, as

above, wherein said transferring step comprises entering the status data on the vehicle

status into a data transfer device [Shop Terminal(s) 720 (See also 220)] and transferring

[See Figs. 1 & 9, particularly Step 930] the status data from the data transfer device

---

[1] All citations refer to the Malin reference unless otherwise noted.

[720] to the computer database [725], wherein the data transfer device is portable [See

¶ 0100] as claimed.

Referring to claims 11, Malin/Madden teaches the method of claim 1, as above,

wherein the status data includes...[See Fig. 3] as claimed.

Referring to claim 12, Malin/Madden teaches the method of claim 11, wherein the

vehicle undergoes repair steps ['tasks' based on the repair plan (See Figs. 1, 3 & 5-6)]

corresponding to each of the information items (i)-(xx) of claim 11 [See Fig. 3 – the

tasks in Malin's repair plan correspond exactly to those of items (i)-(xx) in claim 11] as

claimed.

Referring to claim 13, Malin/Madden teaches the method of claim 12, as above,

wherein said repair steps are performed substantially in the order of information items

(i)-(xx) listed in claim 11. Malin's (as modified by Madden) repair tasks are not explicitly

disclosed in the exact sequence as that listed in the claim. However, the exact order of

this sequence is nothing more than design choice, as long as the end result is the same

(which is true of Malin/Madden). That is, there is nothing unexpected or unobvious in

performing the exact sequence as listed in the claim as opposed to the corresponding

sequence as listed in Fig. 3 of Malin. Further, both Malin and Madden disclose that the

tasks can be scheduled in any order, on a case-by-case basis depending on resources

available and timing, to achieve the same end result. See Figs. 4-6 and the

corresponding portions of Malin's specification, as well as the Abstract and Summary of

Madden's specification, for this disclosure. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to schedule the sequence of

tasks in Malin/Madden to obtain the exact sequence of the claim, to maintain the

premise of efficient repair disclosed in both, while still achieving the same end result.

Referring to claim 14, Malin/Madden teaches the method of claim 12, as above,

wherein the status of the vehicle is provided to the owner of the vehicle [See Step 145,

Figs. 7-8, and Steps 935-945] following... any one of the repair steps [See ¶ 0064, 0080-

0081 & 0090] as claimed.

Referring to claim 15, Malin/Madden teaches the method of claim 14, as above,

wherein the status of the vehicle is automatically provided [e.g. via electronic message

(See Steps. 935 & 945 and Figs. 7-8)] to the owner of the vehicle as claimed.

Referring to claim 16, Malin/Madden discloses a method of tracking the repair

process of a vehicle that is in a repair shop as claimed. See Figures 1-8 and the

corresponding portions of Malin's specification for this disclosure. Malin/Madden

teaches a method [See Figs. 1 & 9] of tracking the repair process of a vehicle that is in a

repair shop, comprising the steps of:

periodically electronically transferring [See ¶ 0034 & 0057-0058 and Steps 925-

930] data on the status of a plurality of vehicles undergoing repair [repair status] to a

database [750] on a computer [705];

determining the length of time ['cycle time'] that the status data for each vehicle

remains unchanged ['dead time'] via software on the computer [statistical analysis

module (See Figs. 2, 7 & 8)];

identifying a vehicle for which the status data is unchanged beyond a

predetermined length of time [See ¶ 0052 & 0074];

determining the extent that the status data is unchanged [See ¶ 0064 and Claims

41-43] beyond a predetermined length of time [task deadline]; and

sorting the vehicles for which the status data is unchanged beyond a

predetermined length of time [Malin: See ¶ 0052, 0064 & 0074; Madden: See re-

arrangement of vehicles and sort-order discussed throughout disclosure] by at least one

vehicle identifier [See Madden's disclosure as cited in combination of claim 1 above] as

claimed.

Referring to claim 17, Malin/Madden teaches the method of claim 16, as above,

wherein the status data is transferred daily [See Figs. 1 & 9] as claimed.

Referring to claim 18, Malin/Madden teaches the method of claim 16, as above,

wherein the status data includes...[See Fig. 3] as claimed.

Referring to claim 19, Malin/Madden teaches the method of claim 16, as above,

wherein said electronically transferring step comprises entering the status data into a

data transfer device [Shop Terminal 720 (See also 220)] and transferring [See Figs. 1 &

9, particularly Step 930] the data from the data transfer device [720] to a computer [705]

as claimed.

Referring to claim 20, Malin/Madden teaches the method of claim 16, as above,

wherein the database [750] stores an identifier for each vehicle [See ¶ 0045 and Figs. 3

& 7], the identifier being selected from the group consisting of vehicle make, vehicle

model and vehicle year [See ¶ 0045] such that the software determines...[See

discussion of claim 16 above] as claimed.

Referring to claim 21, Malin/Madden discloses the system for determining the

status of a vehicle undergoing repair as claimed. See the discussions regarding claims

1, 3 and 7 above for the details of this disclosure.

Claim 22 is rejected on the same basis as claim 8, in light of the basis for claim

21. See the discussions regarding claims 1, 3, 7-8 and 21 above for the details of this

disclosure.

Claim 24 is rejected on the same basis as claim 11, in light of the basis for claim

21. See the discussions regarding claims 1, 3, 7, 11 and 21 above for the details of this

disclosure.

Claims 25-26 are rejected on the same basis as claims 12-13 respectively, in

light of the basis for claim 24. See the discussions regarding claims 1, 3, 7, 11-13 and

24 above for the details of this disclosure.

Claims 43-47 are rejected on the same basis as claims 16-20 respectively. See

the discussions regarding claims 16-20 above for the details of this disclosure.

Response to Arguments

4.   Applicant's arguments filed 17 January 2006 have been fully considered but they

are not persuasive.

Referring to applicant's remarks on pages 2-3 regarding the Section 103

rejections: Applicant argued that Malin does not teach periodically updating repair

status information.

The examiner disagrees for the following reasons: As admitted by applicant, paragraphs 0057-0058 of Malin describe recording start and stop times of particular tasks during a repair process within the (shop as per ¶ 0070-0072) database. The examiner is baffled as to how applicant comes to the conclusion that "this does not constitute periodic updating of the repair status of a vehicle being repaired." Applicant has provided no reasoning as to how this conclusion is reached. The examiner maintains that one of ordinary skill in the art, given these passages of Malin, would clearly understand this to be a periodic updating of repair status of a vehicle being repaired. In Malin, vehicle repairs are broken up into individual tasks. Each individual task of the repair is scheduled to be performed in a certain order. As disclosed in ¶ 0057-0058, the actual repair is tracked by recording (updating) the actual start and stop times of each individual task (status) of the repair. Since the tasks are scheduled and performed in a certain order over time, and the start time and stop time of each task is updated as it occurs, this clearly constitutes periodically updating the repair status information as claimed.

Referring to applicant's remarks on page 3 regarding the Section 103 rejections: Applicant argued that Madden tracks vehicle production, not repair history, based on VIN.

The examiner disagrees for the following reasons: Madden's Abstract explicitly states, "The assembly line includes a number of readers and processing stations to **determine and confirm the identity of vehicles** passing proximate to the readers and processing stations, and the vehicles' build instructions, status, position, condition,

defect and repair history, etc." (emphasis added) This disclosure flies in the face of

applicant's assertions altogether. Although Madden tracks vehicle production, Madden

also clearly states that defects and repairs thereof are part of the overall production

process. Thus, Madden does in fact track repair status/history and the combination is

properly motivated.

Referring to applicant's remarks on pages 3-4 regarding the Section 103

rejections: Applicant argued that neither reference teaches or suggests sorting vehicles

based on unchanged status data.

The examiner disagrees for the following reasons: Applicant's arguments

amount to attacks against the references individually, failing to consider the combination

as a whole. In response to applicant's arguments against the references individually,

one cannot show nonobviousness by attacking references individually where the

rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413,

208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed.

Cir. 1986). Malin's tracking of cycle time and dead time is clearly monitoring the length

of time that repair status is unchanged. Dead time is the amount of time that repair

status is unchanged. Again, applicant has provided no reasoning or evidence to

support the conclusory assertions. Madden sorts vehicles by VIN in order to maintain

proper scheduling in the repair/production cycle. In light of the combination as a whole,

one of ordinary skill in the art would immediately recognize that a vehicle subjected to

Madden's tracking process that sits for an extended length of time with its status

unchanged would be sorted to higher priority in order to maintain scheduling.

Therefore, the combination as a whole obviates the invention as claimed. Applicant's

have failed to rebut the *prima facie* case, which is therefore maintained and made Final.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian Goddard whose telephone number is 571-272-

4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

bdg
31 March 2006
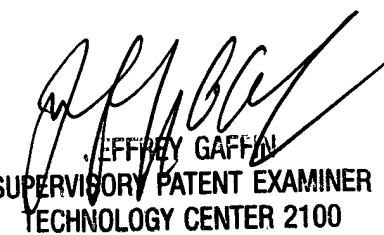
JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100